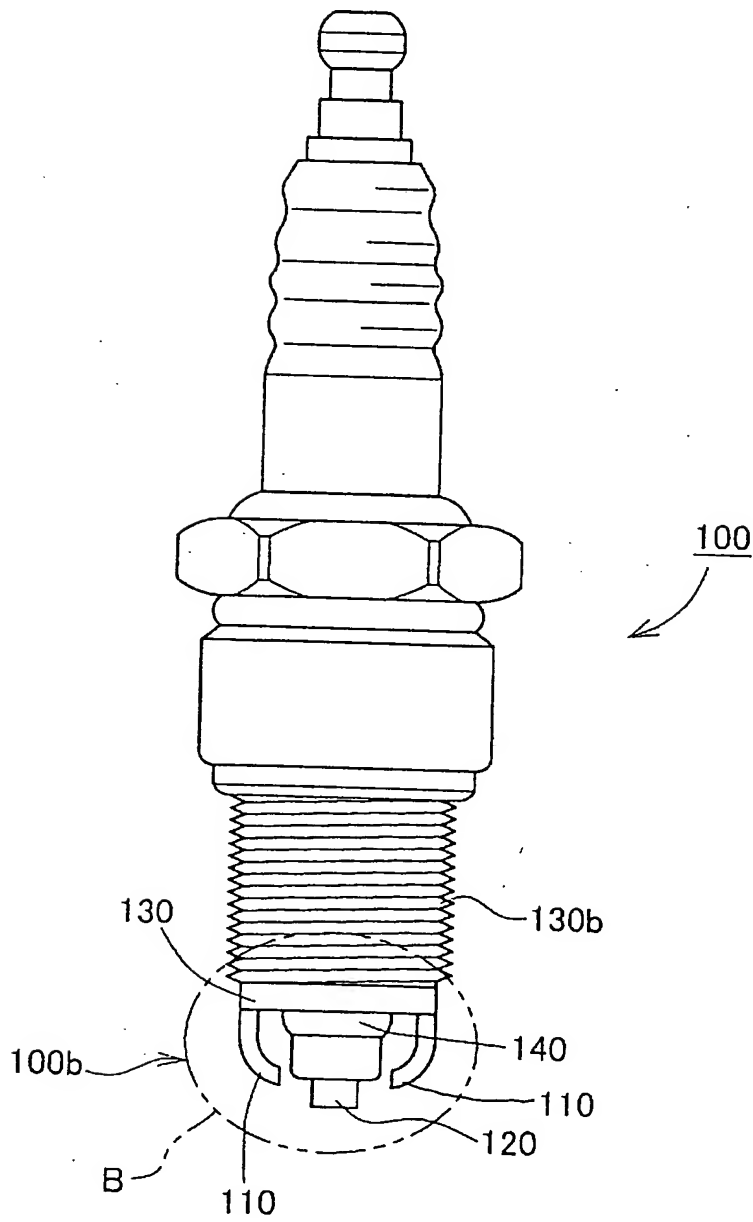
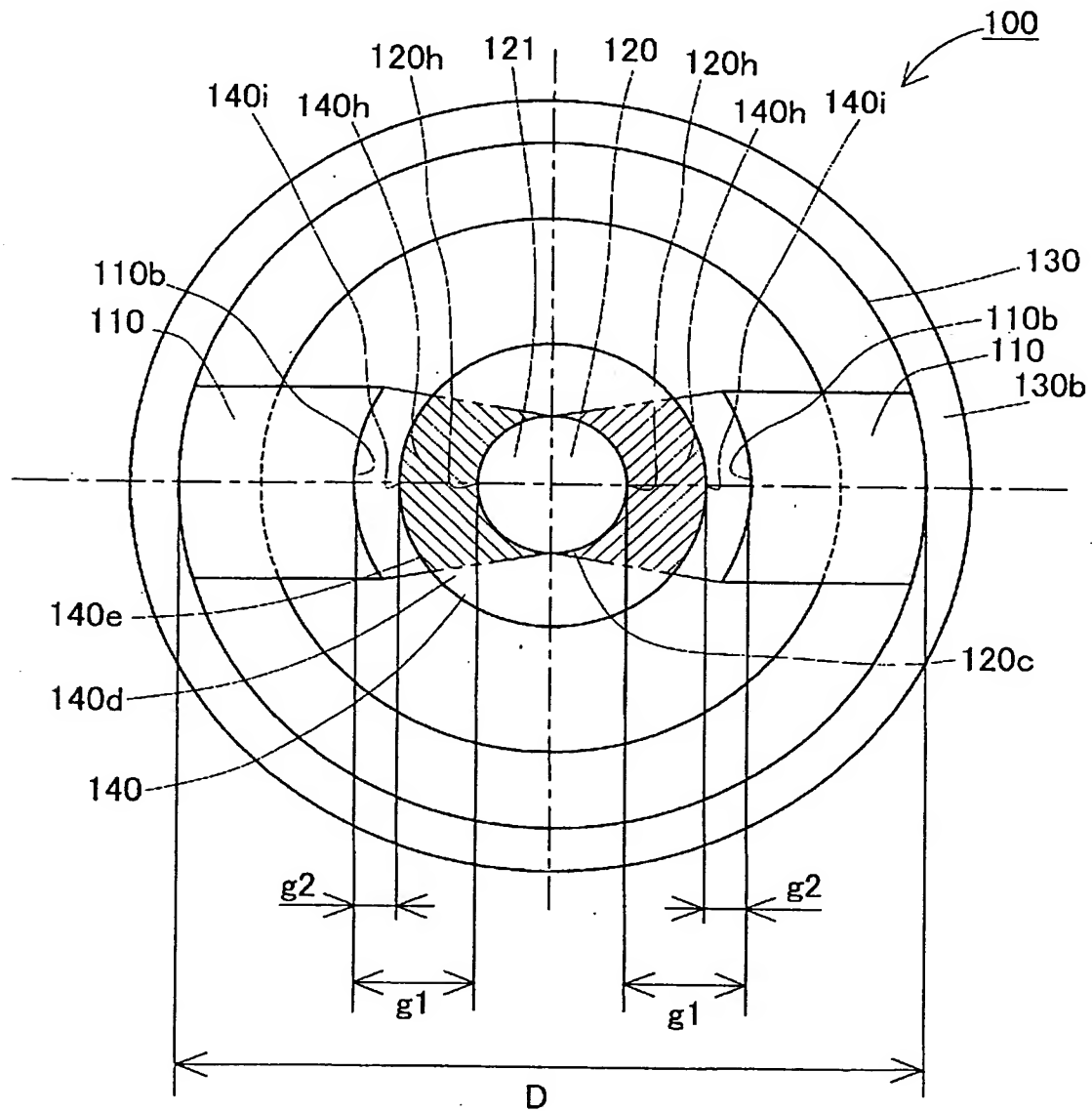
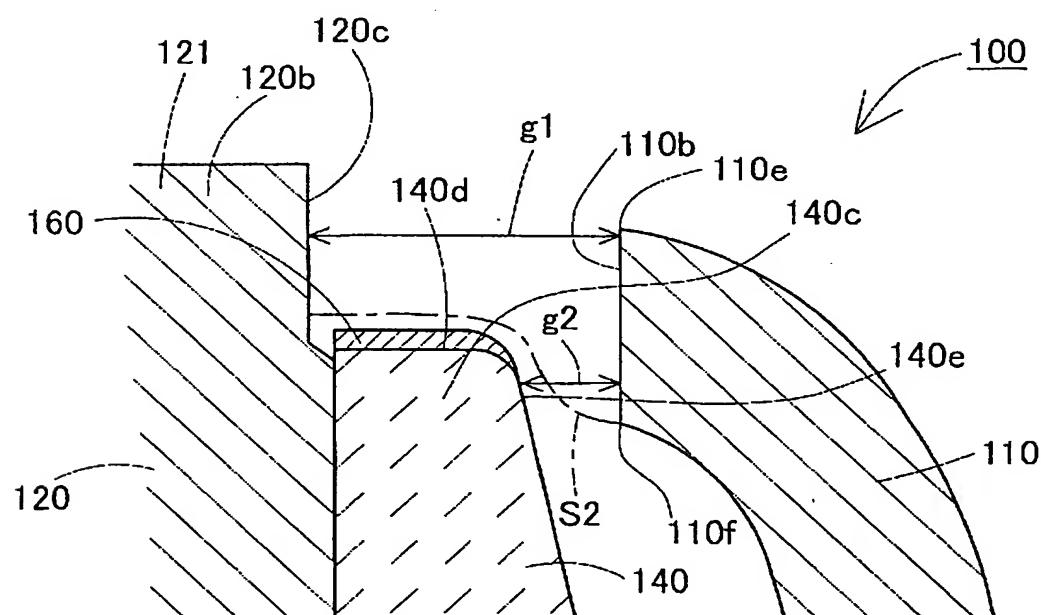


**FIG. 1**









**FIG. 5**

Sample	Components (wt%)					Erosion (mm <sup>3</sup> )	Channeling (mm)	Comprehensive Evaluation
	Cr	Fe	Al	Mn	Si	Ni		
1	1.0	1.0	0.5	2.0	1.5	94.0	0.14 A	0.71 X
2	6.0	6.0	0.5	2.0	1.5	86.0	0.93 X	0.12 A
3	5.0	3.0	0	0	1.5	90.5	0.46 C	0.23 B
4	5.0	3.0	1.0	0	1.5	89.5	0.19 A	0.56 C
5	5.0	3.0	0.5	0	1.5	90.0	0.31 B	0.27 B
6	5.0	3.0	0.5	0.2	1.5	89.8	0.24 B	0.17 A
7	5.0	3.0	0.5	2.0	1.5	88.0	0.26 B	0.18 A
8	5.0	3.0	0.5	4.0	1.5	86.0	0.39 B	0.24 B
9	3.0	3.0	0.5	2.0	1.5	90.0	0.21 B	0.19 A
10	5.0	3.0	0.2	0	1.5	90.3	0.37 B	0.26 B
11	5.0	3.0	0.8	0	1.5	89.7	0.26 B	0.39 B
12	5.0	3.0	0.5	0.15	1.5	89.9	0.22 B	0.19 A
13	5.0	3.0	0.5	3.0	1.5	87.0	0.29 B	0.19 A
14	1.5	1.0	0.5	2.0	1.5	93.5	0.18 A	0.38 B
15	1.0	1.5	0.5	2.0	1.5	93.5	0.17 A	0.39 B
16	5.0	5.0	0.5	2.0	1.5	86.0	0.38 B	0.17 A

Evaluation of erosion

Evaluation of channeling

Comprehensive evaluation

A: less than 0.2 B: 0.2 to less than 0.4 C: 0.4 to less than 0.6 X: 0.6 or more  
A: less than 0.2 B: 0.2 to less than 0.4 C: 0.4 to less than 0.6 X: 0.6 or more  
X: At least either erosion or channeling is evaluated as X.  
C: At least either erosion or channeling is evaluated as C.  
B: Erosion and channeling are both evaluated as B.  
A: At least either erosion or channeling is evaluated as A, and neither erosion  
nor channeling is evaluated as X or B.

FIG. 6

Sample	Components (wt%)						Sink (mm)	Evaluation
	Cr	Fe	Al	Mn	C	Si		
17	3.0	3.0	0.5	2.0	0.001	1.5	0.10	C
18	3.0	3.0	0.5	2.0	0.003	1.5	0.07	B
19	3.0	3.0	0.5	2.0	0.05	1.5	0.02	A
20	3.0	3.0	0.5	2.0	0.1	1.5	0.00	A

Criteria    A: less than 0.04    B: 0.04 to less than 0.08    C: 0.08 to less than 0.12

